

At approximately 12:30 a.m. on Saturday, October 21, 2017, Parkersburg, WV fire crews responded to a fire at the Intercontinental Export and Import Company Plant #1 on Camden Ave in Parkersburg, WV. The facility is a warehouse containing plastics-related and other unknown materials. EPA received a National Response Center report for the fire emergency at 5:00 p.m. on October 21, 2017. A Region 3 On-Scene Coordinator (OSC) coordinated with West Virginia Department of Environmental Protection (WVDEP) officials. WVDEP requested EPA assistance with air monitoring to assist in determining concentrations of particulate matter in ambient air. Superfund Technical Assessment and Response Team (START) contractors were deployed, and EPA facilitated air monitoring which started around 1:00 a.m. on October 22, 2017.

Wood County, WV has the lead for this response; EPA continues to coordinate with the WVDEP. Media and concerned citizens have been directed to contact the Wood County Emergency Operations Center, Public Information Officer, at 304-420-0911.

Data presented in the "Documents" section of this website show the results of fine particulate matter (PM<sub>2.5</sub>) and coarse dust particulate matter (PM<sub>10</sub>) air monitoring conducted by EPA. Particulate air monitoring has been conducted in four different locations surrounding the fire, 24 hours a day, as weather and field conditions permit since Sunday October 22, 2017. Particulate air monitoring is expected to continue, weather permitting, through at least Tuesday. Data will be assessed after Monday to determine if there is still a need for air monitoring.

Because information on the contents of the warehouse has not been certain, this air monitoring has focused on particulate matter less than 10 micrometers in diameter (PM<sub>10</sub>) and less than 2.5 micrometers (PM<sub>2.5</sub>) to track the smoke from the fire. These particulates are small enough to be breathed deep into the lungs and are usually a good indicator of potential health issues. Additional measurements have been made of common breakdown products of plastics and carbon monoxide. Carbon monoxide is a measurement that can be used to evaluate any fire.

The primary health concern has been "spikes" of both PM<sub>10</sub> and PM<sub>2.5</sub>. These spikes have been above 24 hour air quality standards for open air for brief periods of time during the day or night. Many of the spikes have occurred after midnight until just before dawn, usually lasting for periods of less than an hour up to about 4 hours. Then the concentrations dropped below the air standards. Because of wind conditions and the hilly nature of the ground around the warehouse, it is not known how long these higher concentrations have lasted in any given area away from the sampling locations. Local authorities in consultation with state and federal public health and environmental officials made the recommendations to protect public health, including advice on sheltering in their homes and avoiding the smoke. West Virginia officials consulted frequently with their counterparts in Ohio to make sure everyone in the area possibly affected by the smoke from the fire were made aware of the recommendations to protect themselves.

Since Friday October 27, 2017, the combustion has become less efficient and less energetic. The smoke has been hugging the ground and there has been more particulate matter in the air around the fire site. EPA and WVDEP are continuously coordinating with personnel from the Agency of Toxic Substances and Disease Registry (ATSDR), West Virginia Bureau of Public Health, and the Mid Ohio Valley Health Department officials. The health agencies will assess a variety of monitoring and sampling results as they become available from state, local, and federal sources to determine the implications on public health.

Assuming EPA's PM<sub>2.5</sub> average results are essentially 24 hour averages, the results posted at this time through October 25, 2017 ranged from the good through the hazardous Air Quality Index (AQI) categories (<https://airnow.gov/index.cfm?action=aqibasics.aqi>). Aggravation of heart and lung disease are possible under these conditions. People with heart or lung disease should pay attention to symptoms and contact their health care provider if they experience symptoms and reduce their exposure to the impacted air per the incident command's shelter in place recommendations. Sensitive groups should limit prolonged or heavy exertion outdoors, and people with asthma should follow their asthma management plan. Spikes above these average levels continued to occur which could be due to changing wind conditions such as temperature inversions and other changing wind patterns. EPA's monitors would not always be expected to be in the location of every peak.

We do not have comprehensive information about chemicals at this warehouse. Therefore, there is uncertainty about the overall mixture that was potentially (or might still be) in the air. There have been strong plastics odors as well as typical combustion odors in residential areas. The health agencies do not have specific information on what would be causing these odors or the public health implications that could result.

Strong odors in air can cause symptoms in people. Some people are more sensitive to environmental odors than others. In general, as concentration levels increase, more people will have symptoms. Symptoms vary based on your sensitivity to the odor. Young children, the elderly, and pregnant women may be more sensitive to odors. In general, the most common symptoms from odors are headaches, nasal congestion, eye, nose, and throat irritation, hoarseness, sore throat, and cough (<https://www.atsdr.cdc.gov/odors/index.html>). These symptoms generally occur at the time of exposure. Their intensity will depend on the concentration of the odor in air, how often you smell it, and how long exposure lasts.

For anyone concerned about health implications potentially caused by this fire, please contact your primary care physician.

